CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. (Previously Presented) A filter for a carcinogen reduction, the filter comprising:
a filtering surface operable to filter carcinogen-containing material; and
a carcinogen-reducing amount of apurinic acid.

2. (Previously Presented) The filter of Claim 1, wherein the acid is distributed on the filtering surface.

3. (Previously Presented) The filter of Claim 2, wherein the acid is substantially uniformly distributed on the filtering surface.

4. (Previously Presented) The filter of Claim 1, wherein the acid provides structural support to the filter.

5. (Previously Presented) The filter of Claim 1, wherein the filter comprises at least approximately 80% acid by weight.

6-9. (Cancelled)

10. (Previously Presented) A filter for carcinogen reduction in tobacco smoke, the filter comprising:
a filtering surface operable to filter carcinogen-containing tobacco smoke; and
a carcinogen-reducing amount of apurinic acid.

11. (Previously Presented) The filter of Claim 10, wherein the acid is distributed on the filtering surface.

12. (Previously Presented) The filter of Claim 11, wherein the acid is substantially uniformly distributed on the filtering surface.

13. (Previously Presented) The filter of Claim 10, wherein the acid provides structural support to the filter.

14. (Previously Presented) The filter of Claim 10, wherein the filter comprises at least approximately 80% acid by weight.

15-57. (Cancelled)

58. (Previously Presented) The filter of Claim 1, wherein the acid further comprises a crosslinking bond selected from the group consisting of: hydrogen bonds, ionic and covalent bonds, $\pi\pi$ bonds, van der Wals forces, and any combinations thereof.

59. (Previously Presented) The filter of Claim 10, wherein the acid further comprises a crosslinking bond selected from the group consisting of: hydrogen bonds, ionic and covalent bonds, $\pi\pi$ bonds, van der Wals forces, and any combinations thereof.

60. (Previously Presented) The filter of Claim 1, wherein the acid further comprises a crosslinking bond of the type produced by UV radiation, esterification, or hydrolysis.

61. (Previously Presented) The filter of Claim 10, wherein the acid further comprises a crosslinking bond of the type produced by UV radiation, esterification, or hydrolysis.

62. (Previously Presented) The filter of Claim 1, wherein the acid further comprises a crosslinking compound selected from the group consisting of: silica compounds, intercalating agents, neoplastic agents, formaldehyde, formalin, and any combinations thereof.

63. (Previously Presented) The filter of Claim 10, wherein the acid further comprises a crosslinking compound selected from the group consisting of: silica compounds, intercalating agents, neoplastic agents, formaldehyde, formalin, and any combinations thereof.

64. (Previously Presented) The filter of Claim 1, wherein the acid further comprises a siloxane bridge crosslinking compound.

65. (Previously Presented) The filter of Claim 10, wherein the acid further comprises a siloxane bridge crosslinking compound.

66. (Withdrawn) A filter for a carcinogen reduction, the filter comprising:
a filtering surface operable to filter carcinogen-containing material; and
a carcinogen-reducing amount of alkylated nucleic acid.

67. (Withdrawn) The filter of Claim 66, wherein the nucleic acid is distributed on the filtering surface.

68. (Withdrawn) The filter of Claim 67, wherein the nucleic acid is substantially uniformly distributed on the filtering surface.

69. (Withdrawn) The filter of Claim 66, wherein the nucleic acid provides structural support to the filter.

70. (Withdrawn) The filter of Claim 66, wherein the filter comprises at least approximately 80% nucleic acid by weight.

71. (Withdrawn) The filter of Claim 66, wherein the nucleic acid comprises purified DNA.

72. (Withdrawn) The filter of Claim 66, wherein the nucleic acid comprises apurinic acid.

73. (Withdrawn) The filter of Claim 66, wherein the carcinogen-containing material comprises a polyaromatic hydrocarbon.

74. (Withdrawn) The filter of Claim 66, wherein the carcinogen-containing material comprises at least two carcinogens capable of reacting with nucleic acid.

75. (Withdrawn) The filter of Claim 66, further comprising methylated nucleic acid.

76. (Withdrawn) The filter of Claim 66, further comprising hemi-methylated nucleic acid.

77. (Withdrawn) The filter of Claim 66, further comprising ethylated nucleic acid.

78. (Withdrawn) A filter for carcinogen reduction in tobacco smoke, the filter comprising:

a filtering surface operable to filter carcinogen-containing tobacco smoke; and

a carcinogen-reducing amount of alkylated nucleic acid.

79. (Withdrawn) The filter of Claim 78, wherein the nucleic acid is distributed on the filtering surface.

80. (Withdrawn) The filter of Claim 79, wherein the nucleic acid is substantially uniformly distributed on the filtering surface.

81. (Withdrawn) The filter of Claim 78, wherein the nucleic acid provides structural support to the filter.

82. (Withdrawn) The filter of Claim 78, wherein the filter comprises at least approximately 80% nucleic acid by weight.

83. (Withdrawn) The filter of Claim 78, wherein the nucleic acid comprises purified DNA.

84. (Withdrawn) The filter of Claim 78, wherein the nucleic acid comprises apurinic acid.

85. (Withdrawn) The filter of Claim 78, wherein the carcinogen-containing material comprises a polyaromatic hydrocarbon.

86. (Withdrawn) The filter of Claim 78, wherein the carcinogen-containing material comprises at least two carcinogens capable of reacting with nucleic acid.

87. (Withdrawn) The filter of Claim 78, further comprising methylated nucleic acid.

88. (Withdrawn) The filter of Claim 78, further comprising hemi-methylated nucleic acid.

89. (Withdrawn) The filter of Claim 78, further comprising ethylated nucleic acid.

90. (Withdrawn) A filter for a carcinogen reduction, the filter comprising:
a filtering surface operable to filter carcinogen-containing material; and
a carcinogen-reducing amount of capped nucleic acid.

91. (Withdrawn) The filter of Claim 90, wherein the nucleic acid is distributed on the filtering surface.

92. (Withdrawn) The filter of Claim 91, wherein the nucleic acid is substantially uniformly distributed on the filtering surface.

93. (Withdrawn) The filter of Claim 90, wherein the nucleic acid provides structural support to the filter.

94. (Withdrawn) The filter of Claim 90, wherein the filter comprises at least approximately 80% nucleic acid by weight.

95. (Withdrawn) The filter of Claim 90, wherein the nucleic acid comprises purified DNA.

96. (Withdrawn) The filter of Claim 90, wherein the nucleic acid comprises apurinic acid.

97. (Withdrawn) The filter of Claim 90, wherein the carcinogen-containing material comprises a polyaromatic hydrocarbon.

98. (Withdrawn) The filter of Claim 90, wherein the carcinogen-containing material comprises at least two carcinogens capable of reacting with nucleic acid.

99. (Withdrawn) A filter for carcinogen reduction in tobacco smoke, the filter comprising:

a filtering surface operable to filter carcinogen-containing tobacco smoke; and

a carcinogen-reducing amount of capped nucleic acid.

100. (Withdrawn) The filter of Claim 99, wherein the nucleic acid is distributed on the filtering surface.

101. (Withdrawn) The filter of Claim 100, wherein the nucleic acid is substantially uniformly distributed on the filtering surface.

102. (Withdrawn) The filter of Claim 99, wherein the nucleic acid provides structural support to the filter.

103. (Withdrawn) The filter of Claim 99, wherein the filter comprises at least approximately 80% nucleic acid by weight.

104. (Withdrawn) The filter of Claim 99, wherein the nucleic acid comprises purified DNA.

105. (Withdrawn) The filter of Claim 99, wherein the nucleic acid comprises apurinic acid.

106. (Withdrawn) The filter of Claim 99, wherein the carcinogen-containing material comprises a polyaromatic hydrocarbon.

107. (Withdrawn) The filter of Claim 99, wherein the carcinogen-containing material comprises at least two carcinogens capable of reacting with nucleic acid.